GEOGRAPHIC NEWS BULLETIN

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General Headquarters, Washington, D. C.

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A GROUP OF ARAB WORKMEN RESTING NEAR RUINS, WITH THEIR BASKETS FOR CARRYING OFF THE DEBRIS AND THEIR PICKS AND SHOVELS. (See Bulletin No. 4)

Researches in the historic lands along the Euphrates and Tigris Rivers resulted in astounding revelations. Israel, instead of being one of the mighty nations of antiquity, was shown to be a small power which thrived in the late pre-Christian centuries, whose greatness lay in her ideas rather than in military prowess.

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Why Yucatan's Life Hangs by a Fiber

IN Yucatan expeditions now are seeking traces of the Mayas, a people credited with the "foremost intellectual achievement of Ancient America" and called "The Greeks of the New World."

The Yucatan of today is an interesting region, for other reasons. It illustrates how political and economic changes in one country often depend upon conditions in a distant land.

The story of Yucatan in recent times is the story of henequen fiber. Offhand that doesn't seem to affect the average American to any great extent. But it does affect him every time he buys a loaf of bread. The story might be framed like that of the house that Jack built. Henequen means reasonably cheap and plentiful binder twine; binder twine makes possible the use of harvesting machines; harvesters cheapen grain production; cheap grain means cheap bread; and so henequen—and arid Yucatan—play important parts in feeding America and the world.

Wealth From the American Farmer

The other side of the story—the rapid development of the henequen industry and the pouring of wealth into Yucatan—chiefly from the grain belt of North America—undoubtedly played its part in swinging the political pendulum from extreme feudalism to a close approach to socialism.

Henequen, which is a sort of cactus not unlike the century plant or the "pulque cactus" in appearance, had been grown in Yucatan since prehistoric times and its fiber was used in local plantation and village industries. But there was no outside market of considerable magnitude for the fiber until the increasing use of harvesting machinery in the United States created a demand for large quantities of binder twine.

America's Land of Feudalism

Before what may be called "the henequen era" in Yucatan a traveler in the country might have imagined—with a few concessions to race and climate—that he was in the heart of Europe's old feudalism. Some of the principal land owners had truly baronial estates through which one could travel for days. On the most extensive estates were scattered half a dozen or more great stone castle-like haciendas in the care of major domos. In these sumptuous dwellings members of the owner's family might not spend a night a year, for they lived for the most part in state in the capital, Merida, or spent their time traveling in Europe or the United States. In those days cattle raising was the chief industry in Yucatan and prosperity never reached below the few members of the propertied class.

Climate and physical conditions gave Yucatan its feudalism. The surface of the country consists of only the thinnest of soil and underneath is porus limestone. The climate is dry and hot half the year but there is a reasonable amount of rainfall during the other six months.

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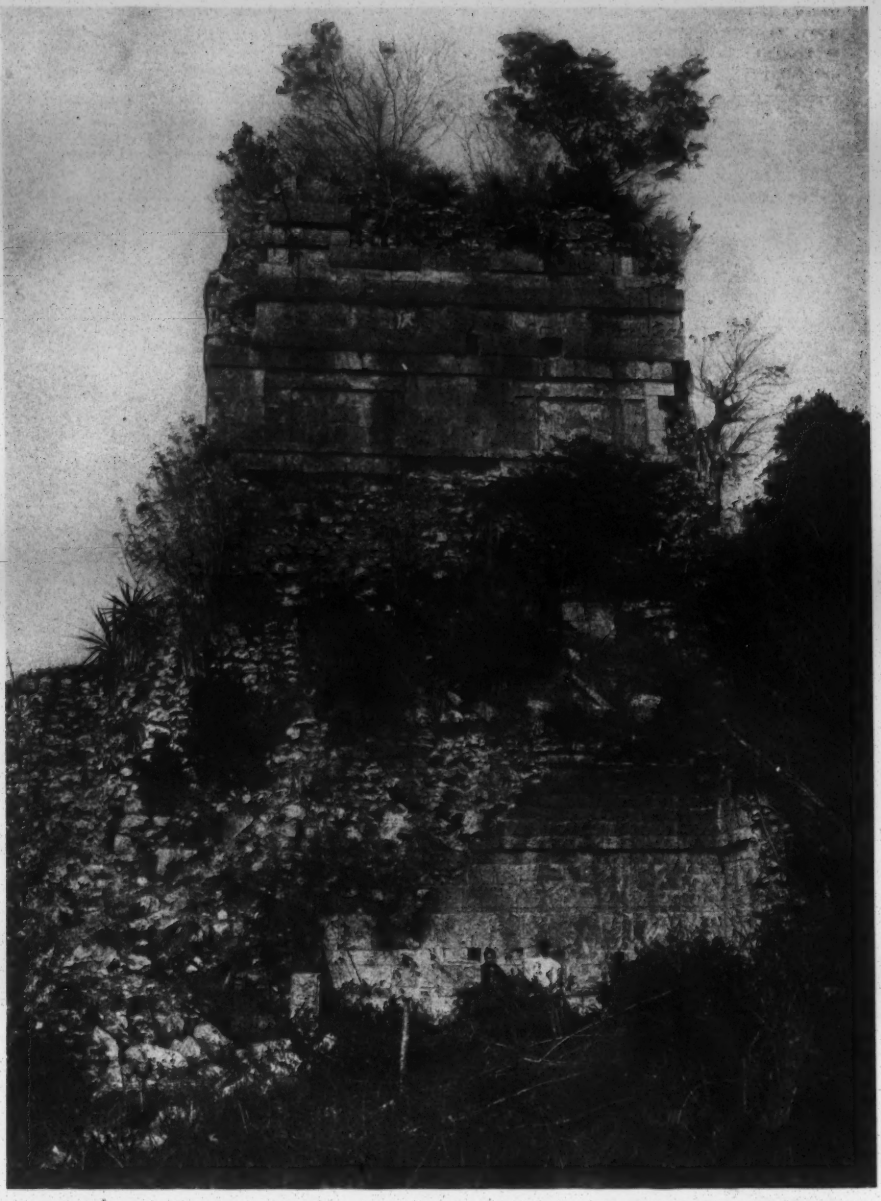

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THE TEMPLE OF THE TIGERS: YUCATAN. (See Bulletin No. 1)

The band of handsomely carved jaguars, alternating with shields, can be seen near the top of the building. Half ruined as it is, the Temple of the Tigers is a treasure and a boon to students of the Maya civilization.

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Reclaiming the Campagna

YOUTHFUL FLOWER VENDERS IN THE SHADOW OF THE COLOSSEUM

RECLAMATION projects are well under way for making the famous Roman Campagna what it was before the fall of the Roman Empire, thus restoring to Italy a region which once was dotted with busy villages and luxuriant fruit trees.

This now dreary plain, of which only one-tenth has for hundreds of generations been turned by the plowshare, is the burial place of scores of Etruscan cities. Its desolate and fever-laden atmosphere has for centuries given to Rome a splendid isolation and filled the sleep of the summer traveler to the city with malaria-haunted dreams.

Aqueduct Ruins Attest Past Glory

The Campagna di Roma, that district of Italy which so nearly corresponds to ancient Latium, lies along the west coast of the country from Civitavecchia to Astura and the Pontine Marshes as far inland as the Alban and Sabine Hills, where Horace wished for a little farm that he might enjoy the "golden mean" of life. Rome lies near its center. In Horace's day it was cultivated and dotted with towns and villas. Today the ruins of aqueducts, once a mark for the Campagna's pride, solemnly speak of their past grandeur.

It is almost improper to speak of the region as a plain. It is rather a volcanic sea extending on both sides of the Tiber. Once the Mediterranean probably pushed far up the Valley and most of the area resembled an archipelago. Then evidently there was a great volcanic upheaval, the earth rose near the coast, the sea was pushed back, the streams from the Alban mountains found no outlet, and the marshy stagnant waters have swallowed cities, leaving no trace of them—merely their memories and their names. Tufa and ashes partially filled up the water, creating a marsh, which became the home of the elephant and the stag.

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Yucatan is one of the few areas in which there is an appreciable rainfall but no streams or even stream beds. As fast as the rain falls during the rainy season it seeps through the thin soil and soaks into the limestone. The lack of surface water and the fact that hardly any food crops can be grown on much of Yucatan's poor soil made it practically impossible for the peons to exist except under the wings of the great landholders.

Peonage Through Waterworks

The land owners constructed capacious reservoirs at their haciendas in which enough water was stored during the rainy season to supply all their retainers through the six months' dry period. The situation was helped out, too, by the cenotes, the unique "water holes" of Yucatan, apparently formed by a falling in of the roofs of subterranean lakes. In most cases these queer natural reservoirs were owned by the landed proprietors.

Toward the close of the nineteenth century henequen production shouldered out cattle production from the place of first importance, and before many years the fiber dominated the life of the country. The old feudal system remained largely unchanged, however, and the landowners became extremely wealthy. Some of the prosperity inevitably filtered down to a growing middle class and even to the plantation laborers, and soon Yucatan gave indications of a political turbulence unknown in the older feudal days.

Super-prosperity From the War

When the World War came prosperity reached its peak in Yucatan with henequen fiber selling for as much as 19 cents a pound. The few landowners were no longer able to dominate the state government and the laborers and their friends who gained control reshaped the entire scheme of things. Wages of workers were fixed by legislation at $5.25 to $24.00 (in United States money) for each 8 hours. After the armistice the price of henequen fell sharply and by 1921 it had fallen to 4 cents or less. The wage laws remained unchanged and many of the plantations, carefully tended for years, were abandoned to wild growth.

Yucatan is the thumb, which with the finger of Florida almost encloses the Gulf of Mexico. It is for the most part a flat plain, its highest hills being measured in only hundreds of feet. It is one of the first lands to which the world-faring Gulf Stream gives its warmth.

The Egypt of America

Cortez touched first in Yucatan in 1519 on his way to conquer Mexico. One of his followers who undertook the subjugation of the peninsula in 1527 found the wonderful ruined temples and palaces of the old Maya cities whose beauties and wonders yearly are further revealed. These people built stone structures of excellent masonry, true angles, and smooth, vertical faces, as early as the beginning of the Christian Era, when the people of northern Europe were living in reed huts. They had astronomical observatories, an accurate calendar, and a far better numerical system than the Romans.

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When Austin, Texas, Was a "World Capital"

EFFORT to revise the State Constitution of Texas, now centering in Austin where the legislature is meeting, recalls how that city played an important, if little known, part in American history.

When Washington, capital of the United States, was little more than a village of mud streets between 1836 and 1846, Austin was a similar "world capital," the seat of government of the independent Republic of Texas, which for ten years existed as the fellow nation of the United States. Ministers and special envoys were accredited to the Republic by the United States and half a dozen or more of the leading nations of Europe; and the forms and amenities of world diplomacy were carried out punctiliously in the little capital.

Most of the legations have been torn down now to make way for modern buildings, but traditions still linger of the efforts of the French and British envoys to gain the greater influence with the young republic, and of the watchfulness of the representative of the United States to see that no loopholes were created to facilitate an attack on the Monroe Doctrine. Descendants of some of the families of the diplomats are residents of the city today.

Selected Like District of Columbia

Like the District of Columbia, Austin was located by special commissioners charged to select a creditable site for the future seat of the republic's government. This was immediately after independence had been won from Mexico. They chose a tract on the Colorado River among gently rolling hills just below where the stream breaks from a range of low mountains. So the modern city, set on its series of heights, has for a background a great sweep of purple hills that adds greatly to its scenic charm.

But these hills have a more utilitarian aspect than that of a picturesque setting for the capital of Texas. In past geologic times a tremendous cataclysm occurred which formed a 500-foot cliff for 500 miles across Texas along the line of the eastern edge of these now rounded hills. This is the Balcones Escarpment, fast becoming a commonplace term in financial districts; for along its line have been discovered nearly all of the great Texas oil fields that have spouted and are spouting their millions of barrels of petroleum.

Street Preserves Memory of Republic

Austin preserves a memory of the only republic to enter the United States in the name of its principal street: Congress Avenue. Along this thoroughfare were situated the congressional halls of the nation. At the head of this avenue, on the crest of a commanding hill, is the present State capitol. Its architecture, like that of many other State capitols, is largely borrowed from the Capitol at Washington, and the building is almost as extensive, being the largest of the forty-eight State houses.

Texas, being a sovereign nation, was the only one of the States to reserve for itself its public domain. One of the important State functions, therefore,

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Italy Realizes Value of Area

Outside of Rome this expanse has lain for centuries, breathing its fever-laden breath upon that city. It has seemed, almost, to await to swallow the Eternal City itself. Now Italy, realizing that this vast area can be made to yield excellent fruits and grains and thus enable her to hold her place as the commercial mistress of the Mediterranean, has drained and irrigated parts of it, and it is hoped that soon the whole of the Campagna will be under cultivation.

In some places the undeveloped area consists of unproductive grazing lands, to which in the autumn herdsmen drive their cattle and horses down from the mountains to graze; in others, there are shaggy grassgrown ditches and deep holes made by searches for catacombs. Occasionally a farmhouse will break the big expanse of loneliness. The homes, which are often enough picturesque little nests, are wretched and dirty. Malaria has chilled the bones of the inhabitants.

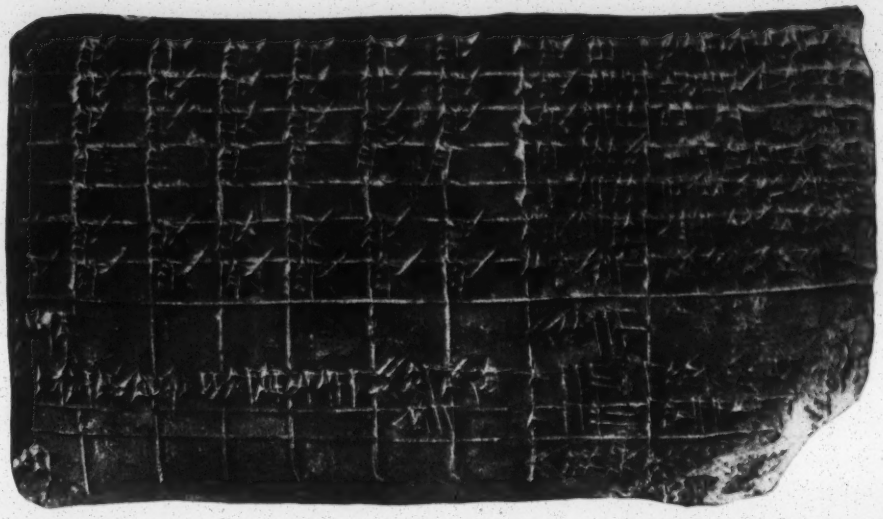
Night Brings Clammy Chill

The region is moderately cold in winter and there are occasional snow storms. In the summer the oppressive heat parches the soil in spots and produces several inches of dust. The careful guide-book warns the traveler that evenings on the Campagna are not in keeping with the day. The sun seems to drop suddenly out of the sky, and a clammy penetrating cold wells up.

Perhaps it is the atmosphere of the surrounding Campagna which gives Rome part of its lure. The marsh's faint whispers, its strange smells, and the mist that rises over it speak of the relentlessness with which it has swallowed everything that ventured to live in it.

It is probable, however, that as Italy reclaims this desolate and deserted region to its former state of prosperity, the old saying applied to the Campagna —"You get rich in six months, but you die in four"—will pass into history.

Bulletin No. 2, April 2, 1923.



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A WOMAN TAKING A MAN'S PLACE 3,200 YEARS AGO—AND SHE RECEIVED A MAN'S SALARY, TOO.

This tablet gives a temple pay-roll for seven months, belonging to the fourteenth century B. C. Another, almost identical, was found written two years later. Three changes had taken place—one man's salary was raised, that of another was reduced, and a woman had taken a man's position, receiving the same salary that he had enjoyed. (See "The Cradle of Civilization," by James Baikie, in The National Geographic Magazine, February, 1916.)

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Moving and Paying Rent Are Ancient Worries

THE HEAD of a modern family who must move or worry about rental rates and leases, whether on May 1 or some of our other "moving days," may think that Americans are alone in having such troubles. Families are having similar tribulations, whether in Japan, Persia, or England, and have had evictions and harsher penalties hanging over them since men wrote on clay tablets 4,000 and more years ago.

Rented habitations we have had with us always, like the poor—and perhaps the two are not altogether unrelated. Nomads alone seem able to escape the shadow of the rent man, a reflection which may make a somewhat tenderer place in our hearts for the Gypsy.

Landlords and Rental Agencies in Babylon

The very earliest records of daily transactions that have been found, the clay tablets on which were written the contracts of Babylonia 3,000 and 4,000 years ago, show that the renting of houses was a flourishing business among the landlords of Babylon and Nippur. The existence of commission merchants and labor agencies leaves little doubt that real estate and rental agencies also existed much as they do today. One can almost picture the frantic house-hunting engaged in by one Sin-idinnam, perhaps accompanied by Mrs. Sin, and doubtless led by a bright young man from the Nippur Rental Agency, which preceded the execution of the following lease dated the "fourth month, first day" in the year 2052 B. C.:

> The house of Damu-ribam, from Damu-ribam, Sin-idinnam, the merchant, has rented as a dwelling and possession at a yearly rental of 1-3 of a shekel of silver.

The ordinary dwellings of Nippur were probably mere shacks of sun-dried brick and mud roofs, but even for such poor accommodations the rental was cheap from a modern point of view. At most a shekel is believed to have had little more purchasing power than $5 has today, so Sin-idinnam had the use of a house for less than $2 a year. The highest rentals set out in the clay leases of Babylonia were 6 shekels, or about $30 a year, a striking contrast to rentals in some more pretentious modern apartment houses where the charges exceed $1,000 a month.

Notaries and Oaths 4,000 Years Ago

Babylonian procedure in regard to real estate was little different from our own. Formal contracts and deeds had to be attested by a notary, and in swearing the person taking the oath raised his right hand. An official copy of the transaction, on a clay tablet, with the notary's attestation was deposited in the temple, the court house of those days.

There was an excellent reason for paying one's rent promptly in Babylon, for creditors could seize one of the debtor's household for a hostage and hold him until satisfactory settlement was made. Interest rates were rather discouraging, also, "the usual rate" referred to on clay tablets being 20 per cent. Instead of a penalty of ten per cent as provided in modern notes if legal steps must be taken to collect, Babylonian notes provided for the doubling of the debt.

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has been the maintenance of a Land Office like that of the Federal Government. The State capitol is a monument to this unique condition, for the State was able to obtain its huge government building without the expenditure of a cent of money by "bartering" to a construction syndicate a tract of 3,000,000 acres. This was a negligible portion of the public domain, though it covered an area more than twice the size of Delaware. It was kept intact for years by its private owners and constituted the most extensive cattle ranch in existence.

Has Huge Dam

The present-day Austin is credited with a resident population of 35,000, but the presence of 5,000 students of the State University and the inmates of more than half a dozen State institutions carries the total during the greater part of the year close to the 50,000 mark.

Across the gorge of the Colorado River just west of Austin is one of the largest of American dams, which forms in the mountain-rimmed canyon a lake 30 miles long. It was constructed by the municipality as a source of water and power, but with numerous mountain streams entering it, constitutes a popular playground as well.

Bulletin No. 3, April 2, 1923.

Form for Renewal of Bulletin Requests

Many requests for the Geographic News Bulletin were made for the year ending with an April, 1923, issue. If you desire the Bulletins continued kindly notify The Society promptly. The attached form may be used:

School Service Department
National Geographic Society
Washington, D. C.

Kindly send ..... copies of the Geographic News Bulletin for the school year beginning with the issue of April 2, for class room use, to

Name .....

Address for sending Bulletins .....

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I am a teacher in ..... school ..... grade

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Tenement Houses in Rome

Little is known of rental customs in Athens, Rome and Byzantium but probably they were little different from those of Babylon and New York, though rates were naturally higher than in the former and lower than in the latter. Rome had its tenements of several stories housing numerous families; but they were built of sun-dried brick and stucco and have long since crumbled.

In Japan today one of the pressing economic problems is the rapid increase of rents. Charges for the use of the bamboo and paper dwellings that make up the majority of the habitations in the cities have increased five-fold in the last five years and there is much congestion.

Even in Teheran, Persia, congestion created tenement houses. In spite of their injunctions of religion and custom to seclude their women, the families of many Persian workmen use a common street door and occupy rooms opening on a common court. The rent is approximately $1 per room per month, a price which does not appear small when it is understood that the unskilled laborer receives about 30 cents for each day he works.

Bulletin No. 4, April 2, 1923.

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HOW BABYLONIA AND ASSYRIA WAGED WAR.

One might reconstruct the entire system of military tactics of Babylonian and Assyrian Kings from the records in bas relief left by them on slabs of stone. This picture shows the method of attacking a city with battering rams and archers. The impaled prisoners in the background show that Sherman's epigrammatic description of war fitted as well in 725 B. C. as it does in 1923 A. D.

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(Ill.) "Peary, Stefansson, and Greely, a Triumvirate in Polar Exploration Achievement." (April 3, 1922.)
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PRIMITIVE WATER CARTS IN USE ALONG THE MEXICAN BORDER.

In some portions of Mexico the maximum rainfall approaches world records, but in the north, along the border, water rights are at a premium. Feuds, accompanied by the use of dynamite in diverting irrigation channels, have occurred in the cotton-growing lands of Lower California. In many cases the supply of water permitted to flow through the irrigation ditches is calculated down to the very minutes per month. (See also "Along Our Side of the Mexican Border," by Frederick Simpich, in The National Geographic Magazine, July, 1928.)

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How a Bear Kicked up a Volcano

SO CLOSE are Nature's fires to the surface in some parts of the "Valley of Ten Thousand Smokes" in Alaska that, with alpenstock or even one's heel, it is possible to open up new vents for the escape of hissing steam and gasses, and so make "volcanoes" to order.

How an inquisitive bear started a little volcano of his own in the Valley is told by Robert F. Griggs in his recently published book,* "The Valley of Ten Thousand Smokes," describing expeditions which he led into this amazing country for the National Geographic Society.

Devoid of Animals at First

"When first discovered, the active area was devoid of evidence of living creatures," writes Dr. Griggs. "The next year a single bear ventured to cross the Valley during our stay.

"But in 1919 bears were frequent visitors. They seemed to represent a new population of bears which, having probably grown up in the vicinity of the Valley, had come to regard it as one of the normal phenomena of their world. They were not satisfied with merely crossing through the steaming areas, but apparently were attracted in some degree by the Smokes. Their tracks often were found close around the largest vents, even far up toward the head of the Valley, many miles from any possible source of food.

Bears Enjoy Warm Ground

"From their behavior, indeed, it seems not at all improbable that they enjoyed lying on the warm ground, seeking good places to bask in the heat, just as a dog picks for his bed the hottest place behind the kitchen stove.

"It was not unusual to find the tracks of a bear leading straight up to one of the large vents, where evidently he had stopped to peer into the mysterious hot hole. In one of the steaming areas Hagelbarger found a place where the hot ground had apparently excited the bear's curiosity, for he had dug into it until he started a small fumarole of his own. The appearance of a cloud of steam under his claws as he broke into the hot crust must have given him a great surprise. It did not scare him away, however, for not satisfied with a single experiment, he tried again in several places, each time digging down till he started the steam before turning away."

Bulletin No. 5, April 2, 1923.

*"**The Valley of Ten Thousand Smokes.**" By Robert F. Griggs, Leader, Katmai-Alaska Expeditions of the National Geographic Society. 350 pages; 262 engravings and color plates; 7 special maps. Cloth $3.00, postpaid in U. S. A. Foreign postage, 25 cents.